

CLAIM AMENDMENTS

Claims 1-13 (withdrawn)

Claim 14 (canceled)

Claim 15 (currently amended): An exchange for the trading of contracts based upon the volatility of an underlying, comprising performance of the following steps ~~The exchange of claim 14, wherein the realized volatility formula is:~~

(a) creating at least one volatility contract for a predetermined term, with a predetermined formula for settlement price based on a realized formula, selected from the group consisting of:

(1)
$$S_{vol} = \sqrt{\frac{P}{n-1} \sum_{t=1}^n (R_t - \bar{R})^2}$$

wherein:

P = approximate number of trading periods in a calendar year, and each observation point "t" is taken at the same time in each trading period; and

\bar{R} = mean of all R_t 's;

(2)
$$S_{vol} = \sqrt{\frac{P_{hl}}{n} \sum_{t=1}^n (\ln \frac{h_t}{l_t})^2}$$

wherein:

P_{hl} = total number of trading periods in a year wherein two observations points " h_t " and " l_t " are used, and " h_t " is the high price point and " l_t " the low price point for each such trading period in that year; and

R_t = f { h_t, l_t }; and

(3)
$$S_{vol} = \sqrt{\frac{P_{ohl}}{n} \sum_{t=1}^n [\frac{1}{2} (\ln \frac{h_t}{l_t})^2 - (2 \ln(2) - 1) (\ln \frac{c_t}{\sigma_t})^2]}$$

wherein:

P_{ohlc} = total number of trading periods, wherein four observations points "h", "l", "c," and "o," are used, and "h," is the high price point, "l," the low price point, "c," is the closing, last or daily settlement price, and "o," the opening price for each such trading period;

R_t = f {h, l, c, o}; and

$$(4) \quad S_{vol} = \sqrt{\frac{P}{n} \sum_{t=1}^n R_t^2}$$

wherein:

P = approximate number of trading periods in a calendar year, and each observation point "t" is taken at the same time in each trading period; and

n = total number of observations within the term; and

R_t = return of the underlying based upon each of the observation points in time " t_n ";

(b) trading the at least one volatility contract at market-determined prices from creation through the date of expiration.

Claims 16 (canceled).

Claim 17 (currently amended): A method for the creation and trading of financial instruments based upon the volatility of an underlying comprising the following steps ~~The method of claim 16, wherein the realized volatility formula is:~~

(a) creating at least one volatility contract for a predetermined term, with a predetermined formula for settlement price based on a realized formula, selected from the group consisting of:

$$(1) \quad S_{vol} = \sqrt{\frac{P}{n-1} \sum_{t=1}^n (R_t - \bar{R})^2}$$

wherein:

P = approximate number of trading periods in a calendar year, and each observation point "t" is taken at the same time in each trading period; and

\bar{R} = mean of all R_t 's;

$$(2) \quad S_{vol} = \sqrt{\frac{P_{hl}}{n} \sum_{t=1}^n (\ln \frac{h_t}{l_t})^2}$$

wherein:

P_{hl} = total number of trading periods in a year wherein two observations points "h," and "l," are used, and "h," is the high price point and "l," the low price point for each such trading period in that year; and

R_t = f { h_t, l_t }; and

$$(3) \quad S_{vol} = \sqrt{\frac{P_{ohl}}{n} \sum_{t=1}^n [\frac{1}{2} (\ln \frac{h_t}{l_t})^2 - (2 \ln(2) - 1) (\ln \frac{c_t}{o_t})^2]}$$

wherein:

P_{ohl} = total number of trading periods, wherein four observations points "h," "l," "c," and "o," are used, and "h," is the high price point, "l," the low price point, "c," is the closing, last or daily settlement price, and "o," the opening price for each such trading period;

R_t = f { h_t, l_t, c_t, o_t }; and

$$(4) \quad S_{vol} = \sqrt{\frac{P}{n} \sum_{t=1}^n R_t^2}$$

wherein:

P = approximate number of trading periods in a calendar year, and each observation point "t" is taken at the same time in each trading period; and

n = total number of observations within the term; and

R_t = return of the underlying based upon each of the observation points in time "t";

(b) trading the at least one volatility contract at market-determined prices from creation through the date of expiration.

Claims 18 (canceled).

Claim 19 (currently amended): A system for the creation, trading, and settlement of financial instruments based upon realized volatility, comprising ~~The system of claim 18,~~ wherein the settlement price of the volatility contract is determined in accordance with the following formula:

(a) creating a volatility contract, by:

(1) predetermining a realized volatility period;

(2) predetermining a time during a trading period that observations

are taken;

(3) predetermining an annualization factor; and

(4) predetermining a formula for the calculation of realized volatility;

and

(b) listing said volatility contract on an exchange;

(c) trading said volatility contract on said exchange during an anticipatory period and a realized volatility period;

(d) settling the volatility contract at expiration in accordance with the predetermined formula;

(e) wherein the settlement price of the volatility contract is determined in accordance with a formula selected from the group consisting of:

(1)

$$S_{vol} = \sqrt{\frac{P}{n-1} \sum_{t=1}^n (R_t - \bar{R})^2}$$

wherein:

P = approximate number of trading periods in a calendar year, and each observation point "t" is taken at the same time in each trading period; and

\bar{R} = mean of all R_t 's;

$$(2) \quad S_{vol} = \sqrt{\frac{P_{hl}}{n} \sum_{t=1}^n (\ln \frac{h_t}{l_t})^2}$$

wherein:

P_{hl} = total number of trading periods in a year wherein two observations points "h," and "l" are used, and "h," is the high price point and "l," the low price point for each such trading period in that year; and

R_t = f {h, l}; and

$$(3) \quad S_{vol} = \sqrt{\frac{P_{ohlc}}{n} \sum_{t=1}^n [\frac{1}{2}(\ln \frac{h_t}{l_t})^2 - (2 \ln(2) - 1)(\ln \frac{c_t}{o_t})^2]}$$

wherein:

P_{ohlc} = total number of trading periods, wherein four observations points "h," "l," "c," and "o," are used, and "h," is the high price point, "l," the low price point, "c," is the closing, last or daily settlement price, and "o," the opening price for each such trading period;

R_t = f {h, l, c, o}; and

$$(4) \quad S_{vol} = \sqrt{\frac{P}{n} \sum_{t=1}^n R_t^2}$$

wherein:

P = approximate number of trading periods in a calendar year, and each observation point "t" is taken at the same time in each trading period; and

n = total number of observations within the term; and

R_t = return of the underlying based upon each of the observation points in time "t."